



Ecology and Environment, Inc.

International Specialists in the Environment

33 North Dearborn Street
Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

US EPA RECORDS CENTER REGION 5



436652

M E M O R A N D U M

DATE: November 5, 1996

TO: Karen Waldron, START Project Manager, E & E,
Cleveland, Ohio

FROM: David Hendren, START Analytical Services Manager,
E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager,
E & E, Chicago, Illinois

SUBJECT: Inorganic Data Quality Review for Nickel, Chromium,
and Zinc, Dayton Electroplating, Dayton, Montgomery
County, Ohio

REFERENCE: Project TDD S05-9609-018 Analytical TDD S05-9610-805
Project PAN 6P1801SIXX Analytical PAN 6CAE01TA

The data quality assurance (QA) review of one solid sample collected from the Dayton Electroplating site is complete. The sample was collected on October 11, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The sample was submitted to BEC Laboratories, Inc., Toledo, Ohio. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 6010.

Sample Identification

START
Identification No.

V07

Laboratory
Identification No.

96T14939

Data Qualifications:

I. Sample Holding Time: Acceptable

The sample was collected on October 11, 1996, and analyzed on October 16, 1996. This is within the 6-month holding time limit.

Dayton Electroplating
Project TDD S05-9609-018
Analytical TDD S05-9610-805
Nickel, Chromium, Zinc
Page 2

II. Calibration:

- Initial Calibration: Acceptable

Recoveries for the initial calibration verification were within 90 to 110%, as required.

- Continuing Calibration: Acceptable

All analytes included in the continuing calibration verification standard were within 90 to 110%, as required.

III. Blanks: Acceptable

Calibration and preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blank.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use.



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FROM: David Hendren, START Analytical Services Manager,
E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager,
E & E, Chicago, Illinois

SUBJECT: Generic Data Quality Review for Sulfate and Chloride,
Dayton Electroplating, Dayton, Montgomery County,
Ohio

REFERENCE: Project TDD S05-9609-018 Analytical TDD S05-9610-805
Project PAN 6P1801SIXX Analytical PAN 6CAE01TA

The data quality assurance (QA) review of three drum liquid samples collected from the Dayton Electroplating site is complete. The samples were collected on October 11, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to BEC Laboratories, Inc., Toledo, Ohio. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 9038 and 9252, for sulfate and chloride, respectively.

Sample Identification

START
Identification No.

Laboratory
Identification No.

D01
D02
D04

96T14933
96T14934
96T14936

Dayton Electroplating
Project TDD S05-9609-018
Analytical TDD S05-9610-805
Sulfate, Chloride
Page 2

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 11, 1996, and analyzed between October 15 and 17, 1996. The Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) does not specify holding time criteria for these parameters.

II. Calibration: Acceptable

Method spikes and duplicates analyzed for each parameter were within acceptable limits.

III. Blanks: Acceptable

Method blanks for both analyses were analyzed and found acceptable.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the OSWER Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.



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Cleveland, Ohio

FROM: David Hendren, START Analytical Services Manager,
E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager,
E & E, Chicago, Illinois

SUBJECT: Generic Data Quality Review for Total and Reactive
Cyanide, Dayton Electroplating, Dayton, Montgomery
County, Ohio

REFERENCE: Project TDD S05-9609-018 Analytical TDD S05-9610-805
Project PAN 6P1801SIXX Analytical PAN 6CAE01TA

The data quality assurance (QA) review of one solid and one liquid sample collected from the Dayton Electroplating site is complete. The samples were collected on October 11, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to BEC Laboratories, Inc., Toledo, Ohio. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 9010 and 7.3.3.2.

Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
V08	96T14940
D11	96T14943

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 11, 1996, and analyzed on October 15 and 16, 1996. This is within the 14-day holding time limit.

II. Calibration: Acceptable

The recovery of the total cyanide method spike was slightly below the 85 to 115% limit. Due to the high level of cyanide detected in the samples, qualification was not judged to be necessary. The recovery of the reactive cyanide method spike was low and is typical of this analysis.

III. Blanks: Acceptable

Blanks were analyzed with each analyses and were free of analytes.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.



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FROM: David Hendren, START Analytical Services Manager,
E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager,
E & E, Chicago, Illinois

SUBJECT: Generic Data Quality Review for pH and Flash Point,
Dayton Electroplating, Dayton, Montgomery County,
Ohio

REFERENCE: Project TDD S05-9609-018 Analytical TDD S05-9610-805
Project PAN 6P1801SIXX Analytical PAN 6CAE01TA

The data quality assurance (QA) review of nine waste liquid samples collected from the Dayton Electroplating site is complete. The samples were collected on October 11, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to BEC Laboratories, Inc., Toledo, Ohio. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 9040 and 1020.

Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
D01	96T14933
D02	96T14934
D03	96T14935
D04	96T14936
V05	96T14937
V06	96T14938
V09	96T14941
D10	96T14942
V12	96T14944

Dayton Electroplating
Project TDD S05-9609-018
Analytical TDD S05-9610-805
pH, Flash Point
Page 2

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 11, 1996, and were analyzed on October 15, 1996. The Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) does not specify holding times for these criteria.

II. Calibration: Acceptable

The pH meter was calibrated using three buffered solutions and the flash point was checked by analysis of p-xylene. Both analyses were found to be acceptable.

III. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the OSWER Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.

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Cleveland, OH 44130
ATTN: Dave Hendren



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FAX: (216) 425-1349

lab no.	96T14933
p.o. no.	

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Drum 01 - Room 1 -
Station # D01 - 10/11/96 @ 1000

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
Sulfate	SW-846, 9038	820,000 mg/Kg
pH in 10% S.U.	EPA-600, 150.1	less than 1 *

* Due to the characteristics of the sample it was necessary to add water for pH determination.

date completed:
10/16/96

tech:
CSY

approved by:

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lab no. 96T14934

p.o. no.

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Drum 02 - Room 1 -
Station # D02 - 10/11/96 @ 1010

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
pH in 10% S.U.	SW-846, 9040	less than 1 *
Total Chloride	SW-846, 9252	380,000 mg/L

* Due to sample characteristics it was necessary to add water for the pH determination.

date completed:
10/18/96

tech:
CSY/GJB

approved by:

A handwritten signature in black ink, appearing to read "Dave Hendren", is written over the "approved by:" label.

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lab no.	96T14935
p.o. no.	

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Drum 03 - Room 1 -
Station # D03 - 10/11/96 @ 1012

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
pH in 10% S.U.	SW-846, 9040A	greater than 13 *

* Due to the characteristics of the sample it was necessary to add water for the pH determination.

date completed:
10/15/96

tech:
CSY

approved by:

A handwritten signature in black ink, appearing to read "J. E. Huff", is written over a horizontal line.

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lab no. 96T14936

p.o. no.

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Drum 04 - Room 1 -
Station # D04 - 10/11/96 @ 1015

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
pH in 10% S.U.	EPA-600, 150.1	11.67 *
Total Chloride	SW-846, 9252	170,000 mg/L

* Due to sample characteristics it was necessary to add water for the pH determination.

date completed:
10/15/96

tech:
CSY/GJB

approved by:

A handwritten signature in dark ink, appearing to read "J. E. Huff", is written over a horizontal line.

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lab no.	96T14937
p.o. no.	

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Vat 05 - Room 1 -
Station # V05 - 10/11/96 @ 1018

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
pH in 10% S.U.	SW-846, 9040A	12.67 *

* Due to the characteristics of the sample it was necessary to add water for the pH determination.

date completed:
10/15/96

tech:
CSY

approved by:

A handwritten signature in black ink, appearing to be "J. A. Huff", is written over the "approved by:" label and extends across the right side of the signature line.

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lab no.	96T14938
p.o. no.	

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Vat 06 - Room 1 -
Station # V06 - 10/11/96 @ 1021

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
pH in 10% S.U.	SW-846, 9040A	less than 1 *

* Due to the characteristics of the sample it was necessary to add water for the pH determination.

date completed:
10/15/96

tech:
CSY

approved by:

A handwritten signature in black ink, appearing to read "J. E. Huff", is written over a horizontal line.

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lab no. 96T14939

p.o. no.

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - solid - Vat 07 - Room 1 -
Station # V07 - 10/11/96 @ 1025

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
Total Chromium	SW-846, 6010A	49 mg/Kg
Total Nickel	SW-846, 6010A	43 mg/Kg
Total Zinc	SW-846, 6010A	10,000 mg/Kg

date completed:
10/17/96

tech:
BSG/BHS

approved by:

A handwritten signature in black ink, appearing to read "J. E. Huff", is written over the "approved by:" label.

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lab no.	96T14940
p.o. no.	

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Vat 08 - Room 2 -
Station # V08 - 10/11/96 @ 1115

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
Total Cyanide	SW-846, 9010	6500 mg/Kg
Reactive Cyanide	SW-846, 7.3.3.2	less than 0.1 mg/Kg

date completed:
10/16/96

tech:
CSY/LMV

approved by:

A handwritten signature, likely of Dave Hendren, is written over the "approved by:" label and extends across the bottom right of the page.

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lab no.	96T14941
p.o. no.	

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Vat 09 - Room 2 -
Station # V09 - 10/11/96 @ 1120

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
pH in 10% S.U.	SW-846, 9040A	less than 1 *

* Due to the characteristics of the sample it was necessary to add water for the pH determination.

date completed:
10/15/96

tech:
CSY

approved by:

A handwritten signature in black ink, appearing to read "J. E. Neff", is written over a horizontal line.

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lab no. 96T14942

p.o. no.

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Drum 10 - Room 3 -
Station # D10 - 10/11/96 @ 1130

RESULTS:

ANALYTE

METHOD

RESULT

Flash Point - SETAFLASH

SW-846, 1020

less than 74°F

date completed:
10/15/96

tech:
LMV

approved by:

A handwritten signature in black ink, appearing to read "J. E. Huff", is written over the "approved by:" label.

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lab no.	96T14943
p.o. no.	

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - solid - Drum 11 - Room 3 -
Station # D11 - 10/11/96 @ 1145

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
Total Cyanide	SW-846, 9010	53,000 mg/Kg
Reactive Cyanide	SW-846, 7.3.3.2	470 mg/Kg

date completed:
10/16/96

tech:
CSY/LMV

approved by:

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lab no.	96T14944
p.o. no.	

rev: 0

SAMPLE

DESCRIPTION: Project # KJ5100 - S05-9610-805 - grab - liquid - Vat 12 - Room 3 -
Station # V12 - 10/11/96 @ 1200

RESULTS:

<u>ANALYTE</u>	<u>METHOD</u>	<u>RESULT</u>
pH in 10% S.U.	SW-846, 9040A	less than 1 *

* Due to the characteristics of the sample it was necessary to add water for the pH determination.

date completed:
10/15/96

tech:
CSY

approved by:

A handwritten signature in black ink, appearing to read "J. Ruff", is written over the "approved by:" label.